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DOCUMENT-IDENTIFIER: US 5207492 A

TITLE: Mirror assembly

Brief Summary Text (6):

while these auxiliary brake lamps generally operate in the manner intended, that is, to provide a visual signal when the brakes are applied, the means by which these auxiliary brake lamps have been mounted on overland vehicles, and more particularly passenger automobiles wherein the auxiliary brake lamps are mounted in the rear windscreen thereof, have generally been considered to detract from the stylish appearance of the most recently manufactured automobiles. Further, and when the auxiliary brake lamp is mounted in a position exterior to the passenger compartment, the auxiliary brake lamp and its associated exterior housing detracts from the surrounding design features of the automobile and which normally include smooth substantially continuous lines which tend to give the vehicle an overall aerodynamic appearance. Further, the housing of this assembly provides an obstruction to the rearward view of the operator, therefore presenting a safety hazard, causes more drag and generates wind noise. In addition, these housings are prone to obstruction during periods of heavy snowfall, are not conspicuous from locations which are adjacent to and rearwardly of the overland vehicle, and are easily obscured by towed vehicles such as boat trailers, camper trailers, and the like.

Brief Summary Text (8):

The manufacturers of overland vehicles have approached the problems related to the function and appearance of auxiliary brake lamp assemblies by designing brake lamps having lower relative profiles and by making other automobile body design changes wherein the auxiliary brake lamp is not as visibly apparent when one views the automobile. However, such design modifications have not been completely satisfactory with respect to aesthetic, and other design considerations, as well as with regards to the intended operation of these same devices. More particularly, these devices, in order to be effective, must be conspicuous. This, of course, is contrary to the desire of automobile designers who wish to produce automobiles which have a low-profile and an aerodynamic appearance. Moreover, and with respect to the earlier identified problems related to light trucks, and tractor-trailer combinations, it should be understood that, with respect to light trucks, loads placed in the beds thereof could conceivably obscure such auxiliary brake assemblies if they were mounted in a fashion similar to that used for passenger vehicles. Moreover, commonly employed equipment, such as camper shells and roll bars also tend to obscure such center mounted brake lamps.

Detailed Description Text (7):

The mirror assembly 10, and which is best illustrated by reference to FIG. 5, includes a support member 40 having first and second ends 41 and 42 respectively, and wherein the first end 41 is fixed to a mounting bracket 43 which includes a pair of apertures 44. The apertures 44 receive suitable fasteners such as screws or the like. In addition, the second end 42 is fixed to a swivel connector 45 in a manner which is well understood in the art. The mounting bracket has a substantially centrally disposed aperture 46 which is mounted in registry with a passageway 47 which is formed substantially centrally of the support member 40. An aperture 48 is formed in the swivel connector 46 and disposed in registry with the passageway 47. The swivel connector 45 is fixed to a housing or enclosure 50 and thereby permits the enclosure to be rotated into various positions relative to the operator's position 20 thereby positioning an accompanying mirror in selected positions to provide a field of view rearwardly of the overland vehicle 11 appropriate for the operator 30. The mirror will be discussed in greater detail hereinafter. The housing or enclosure 50 has a top wall 51 which has formed therein an aperture 51A which is

disposed in substantial registry with the aperture 48, a bottom wall 52, and a side wall 53 which joins the top and bottom walls together. As shown in FIG. 2, the sidewall 53 is narrowly rectangular and arcuately shaped, however, it should be understood that other enclosure shapes will work with equal success and the final enclosure shape will be largely determined based upon aesthetic, aerodynamic or acoustical considerations. The individual wall members 51, 52 and 53, respectively, have exterior, or outside surfaces 54 and opposite, interior, or inside surfaces 55 which define a cavity 60 of predetermined dimensions. Further, the individual walls, in combination, define an aperture 61 which permits access to the cavity 60. A number of assemblies which are not shown, may be made integral with or mounted in the enclosure these include motors and related actuator assemblies, and heaters, for example, which are operable to act upon a mirror in well understood ways. The mirror will be discussed in greater detail hereinafter.

<u>Current US Cross Reference Classification</u> (4): 362/494